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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/781,990      | 02/13/2001  | Antti Forstadius     | 4925-58             | 2033             |

7590 10/18/2004  
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EXAMINER

LEE, ANDREW CHUNG CHEUNG

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2664

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |                                      |  |  |
|--|--------------------------------------|--|--|
| <p align="center"><b>Office Action Summary</b></p> | <b>Application No.</b><br>09/781,990 | <b>Applicant(s)</b><br>FORSTADIUS ET AL. |  |
|  | <b>Examiner</b><br>Andrew C Lee      | <b>Art Unit</b><br>2664                  |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 May 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 38, 43 - 55 is/are rejected.
- 7) ☒ Claim(s) 39 - 42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>Aug 24, 2001</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Oath/Declaration***

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: The Declaration and Power of Attorney For Patent Application (dated 02-13-2001) is unsigned.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Fig. 1A. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

3. The disclosure is objected to because of the following informalities:
- The reference number "216", on page 2, line 11; page 3, line 2, line 6 and line 9 respectively, should be deleted. It bears no meaning because it does not refer to any Figure.
  - Page 13, line 21; page 14, lines 2 – 3, the reference term "satellites" should be corrected as "Nodes" so as in consistent with the specification disclosed.
  - Fig. 2, there are some discrepancies for the reference element 100-2; the Office would request the Applicant to clarify the assigned 102-2 for S and 104-2 for M.
  - The Office would request the Applicant to provide the clarification or examples usage of ID No. (nnnnnnnnn) and PW (AAAAAAA) as disclosed in Fig. 3 for tables 1 through 5 instead of using the reference elements 102-1,2,3,4 and 104-1,2,3,4.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 recites the limitation "wherein in step (c) paging is performed by the master" in lines 1 –2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 13 – 14, 20 – 32, 34 – 37, 43 – 44, 46 – 52, 55 are rejected under 35 U.S.C. 102(e) as being anticipated by Takatori et al. (U.S. Patent No. 6763231 B2).

Regarding Claims 13, 36 and 37, Takatori et al. discloses the limitation of a method of configuring an RF network (Fig. 2, column 2, lines 12 – 15), the network comprising a plurality of network nodes for communicating with other nodes (Fig. 3, column 12, lines 1 – 5), each having a controller unit (Fig. 2, elements 21 and 11) and a data store (Fig.2, elements 29 and 19; column 13, lines 59 – 61), the method comprising the steps of a) storing identifiers of all nodes on the network in a data store accessible to at least one node (column 14, lines 14 – 20); b) paging from the at least one node other nodes (column 15, lines 60 – 62); c) detecting other nodes within the coverage area of the at least one node by receiving responses of said detected nodes

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to paging (column 16, lines 16 – 21); d) updating information regarding said detected nodes according to the received responses of said detected nodes to paging (column 17, lines 13 – 22); e) associating said detected nodes with a first value of a dynamic variable, the value of the dynamic variable depending on the placement of each said detected node in the network (column 17, lines 25 – 32); and f) propagating the updated information to said detected nodes in the network (column 14, lines 24 – 33).

Regarding Claim 14, Takatori et al. discloses the limitation of the method of claimed wherein each node comprising a transceiver connected to the controller unit for communicating with other transceivers (Fig. 2, elements 21, 23, 11 and 13), each transceiver having a unique identifier (column 16, lines 34 – 37).

Regarding Claims 21, 30, Takatori et al. discloses the limitation of the method of claimed wherein: if a node comprising at least two transceivers (column 13, lines 1 – 5), the first one to answer paging is designated as a slave transceiver of the RF network (Fig. 1, element 5, column 25 – 29) and least one of the other transceivers is designated as a master transceiver of the RF network (column 10, lines 33 – 36), and each transceiver designated as a master does not answer paging (column 12, lines 33 – 41).

Regarding Claim 22, Takatori et al. discloses the limitation of the method of claimed paging be performed by the master (column 12, lines 33 – 41).

Regarding Claims 23, 31, Takatori et al. discloses the limitation of the method of claimed wherein a node further including a transceiver for communication with wireless terminals (Fig. 3, column 11, lines 62 – 67), whereby a wireless terminal in transmission range of a node may communicate with another wireless terminal in transmission range of a node (Fig. 3, column 12, lines 1 – 8).

Regarding Claims 24, 25, 32, 34, Takatori et al. discloses the limitation of the method of claimed wherein a transceiver further communicating with wireless terminals (Fig. 3, column 11, lines 62 – 67; column 12, lines 1 – 5), whereby a wireless terminal in transmission range of a node may communicate with another wireless terminal in transmission range of a node (Fig 3, elements 1 and 2A).

Regarding Claim 26, Takatori et al. discloses the limitation of the method of claimed wherein each transceiver further has a password associated with it (column 17, lines 13 – 15), and wherein: in step (c), passwords are included in paging (column 17, lines 15 – 20); and a node does not reply to paging unless the password included in paging matches the password associated with the transceiver (column 16, 62 – 67; column 17, lines 1 – 3).

Regarding Claim 27, Takatori et al. discloses the limitation of the method of claimed wherein further: each transceiver has associated with it a portable machine-readable tag containing the transceiver's unique identifier (Fig. 2, elements 4

and 5); associated with the network is a tag reader for reading the machine-readable tags; and step (a) comprising substeps: (a1) presenting each tag to the tag reader (column 15, lines 60 – 62); and (a2) transferring each output of the tag reader to the data store of the control node (column 16, lines 42 – 46).

Regarding Claims 28, 35, Takatori et al. discloses the limitation of the method of claimed wherein further: each transceiver has associated with it a portable machine-readable tag containing the transceiver's unique identifier and password (Fig. 2, elements 4 and 5; column 17, lines 13 – 24); associated with the network is a tag reader for reading the machine-readable tags; and step (a) comprising substeps: (a1) presenting each tag to the tag reader (column 15, lines 60 – 62); and (a2) transferring each output of the tag reader to the data store of the first node (column 16, lines 42 – 46).

Regarding Claims 29, 52, 55, Takatori et al. discloses the limitation of a self-configuring RF network (Fig. 2, column 2, lines 12 – 15), the network comprising: a plurality of nodes for communicating wirelessly with other nodes of the RF network (Fig. 3, column 12, lines 1 – 5), wherein at least one of the nodes is selected as a control node (column 12, lines 9 – 14), each node including: a control logic (Fig. 2, elements 21 and 11); a data store connected to the control logic (Fig. 2, elements 29 and 19; column 13, lines 59 – 61); at least one transceiver connected to the control logic and identified by a unique address for communicating wirelessly with other nodes of the



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network (column 12, lines 33 – 41); a transceiver list database connected to the data store for storing updateable information of all transceivers of the RF network for network configuration (column 14, lines 14 – 20); and a dynamic variable linked to the transceiver list database for indicating position of each node in the RF network relative to the control node (column 3, lines 64 – 67; column 4, 1 – 2).

Regarding Claims 43, 50, Takatori et al. discloses the limitation of the method of claimed wherein the RF network is a short-range RF network (column 2, lines 16 – 18).

Regarding Claims 20, 44, 51, Takatori et al. discloses the limitation of the Method of claimed wherein the short-range RF network is a Bluetooth network (column 2, lines 12 – 15).

Regarding Claims 46, 47, Takatori et al. discloses the limitation of a node for use in a self-configuring RF network (Fig. 2, column 2, lines 12 – 15), comprising: a backbone transceiver identified by a unique address and associated with a password (column 12, lines 33 – 41; column 17, lines 13 – 18), for communicating with other nodes of the network (column 16, lines 16 – 19); and control logic configured to detect when the backbone transceiver receives a paging message directed to its unique address (column 16, lines 26 – 32), and in response, to direct that: a password received in the paging message be verified as the password associated with the backbone transceiver (column 16, lines 42 – 48); a node transceiver list received in the paging

message, containing addresses and passwords of other nodes in the network, be received and stored (column 17, lines 25 – 32); a value "n" of a dynamic variable received in the paging message be received and stored; and the node becomes unresponsive to further paging messages (column 17, lines 13 – 23).

Regarding Claims 48, 49 Takatori et al. discloses the limitation of a node according to claimed subject matter comprising a transceiver for communicating with mobile terminals (column 4, lines 3 – 7), whereby a mobile terminal in transmission range of a node may communicate with another mobile terminal in transmission range of a node (column 4, lines 7 – 16).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 – 12, 15 – 19, 33, 38, 45, 53 – 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takatori et al. (U.S. Patent No. 6763231 B2) in view of Bridgelall (U.S. Patent No. 6717516 B2).

Regarding Claims 1, 15, Takatori et al. discloses the limitation of method of configuring an RF network (Fig. 2, column 2, lines 12 – 15), the network comprising at

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least two nodes (Fig. 3, column 12, lines 1 – 5), each having a controller (Fig. 2, elements 21 and 11), a data store (Fig. 2, elements 29 and 19; column 13, lines 59 – 61), and at least one transceiver for communicating with other nodes (Fig. 2, elements 23, 3 and 13), each transceiver having a unique identifier (column 3, lines 15 – 21), the method comprising the steps of: (a) the claimed assigning a predetermined value to a variable  $n$  (column 3, lines 17 – 18; column 6, lines 1 – 3); (b) the claimed selecting one certain of the nodes and associating it with the value of  $n$ ; (column 3, lines 15 – 19; lines 35 – 43) (c) paging all other nodes from a node associated with the value of  $n$  (column 3, lines 18 – 20); (d) the claimed in a node associated with the value of  $n$ , noting nodes which reply to paging and associating them with the value of  $(n+1)$  (column 10, lines 47 – 51); (e) the claimed making all nodes associated with the value of  $n$  or with lower values unresponsive to paging (Fig. 1); (f) incrementing the value of  $n$  (Fig. 1, column 10, lines 26 – 41); and (g) repeating steps (c) through (f) until no nodes reply to paging (column 10, lines 57 – 63), Takatori et al. does not disclose expressly whereby nodes beyond transmission range of other nodes but within transmission range of intermediate nodes become known to said other nodes and become accessible to said other nodes by relaying through said intermediate nodes. Bridgelall discloses whereby nodes beyond transmission range of other nodes but within transmission range of intermediate nodes become known to said other nodes and become accessible to said other nodes by relaying through said intermediate nodes (Fig. 1, column 3, lines 43 – 47; column 4, 55 – 65). It would have been obvious to modify Takatori et al. to include whereby nodes beyond transmission range of other nodes but within transmission range of intermediate

nodes become known to said other nodes and become accessible to said other nodes by relaying through said intermediate nodes such as that taught by Bridgelall in order to provide an improved method and system for locating objects having a data communication mobile unit or an RFID tag.

Regarding Claims 2, 4, 17, 19, 33, Takatori et al. discloses the limitation of configuring an RF network (Fig. 2, column 2, lines 12 – 15), the network comprising at least two nodes (Fig. 3, column 12, lines 1 – 5), each having a controller (Fig. 2, elements 21 and 11), a data store (Fig. 2, elements 29 and 19), and at least one transceiver for communicating with other nodes (Fig. 2, elements 23, 3 and 13), each transceiver having a unique identifier (column 3, lines 15 – 21), but Takatori et al. does not disclose expressly the method of claimed wherein said certain node is further a gateway to another network. Bridgelall discloses wherein said certain node is further a gateway to another network (Fig. 1, elements 12A, 12B, 12C, 12D; column 3, lines 52 – 56). It would have been obvious to modify Takatori et al. to include wherein said certain node is further a gateway to another network such as that taught by Bridgelall in order to provide an improved method and system for locating objects having a data communication mobile unit or an RFID tag.

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Regarding Claims 3, 16, 18, 38, Takatori et al. discloses the limitation of configuring an RF network (Fig. 2, column 2, lines 12 – 15), the network comprising at least two nodes (Fig. 3, column 12, lines 1 – 5), each having a controller (Fig. 2,

elements 21 and 11), a data store (Fig.2, elements 29 and 19), and at least one transceiver for communicating with other nodes (Fig. 2, elements 23, 3 and 13), each transceiver having a unique identifier (column 3, lines 15 – 21), but Takatori et al. does not disclose expressly the method of claimed comprising step: (h) repeating steps (a) through (g) with a different node selected as the certain node. Bridgelall disclose the method of claimed comprising step: (h) repeating steps (a) through (g) with a different node selected as the certain node (Fig.1, elements 12A, 12B, 12C, 12D; column 3, lines 52 – 56; column 4, lines 1 – 8). It would have been obvious to modify Takatori et al. to include the method of claimed comprising step: (h) repeating steps (a) through (g) with a different node selected as the certain node such as that taught by Bridgelall in order to provide an improved method and system for locating objects having a data communication mobile unit or an RFID tag.

Regarding Claim 5, Takatori et al. discloses the limitation of the method of claimed wherein the RF network is a short-range RF network (column 2, lines 16 – 18).

Regarding Claim 6, Takatori et al. discloses the limitation of the Method of claimed wherein the short-range RF network is a Bluetooth network (column 2, lines 12 – 15).

Regarding Claim 7, Takatori et al. discloses the limitation of the method of claimed wherein: if a node comprising at least two transceivers (column 13, lines 1 – 5),

the first one to answer paging is designated as a slave transceiver of the RF network (Fig. 1, element 5, column 25 – 29) and least one of the other transceivers is designated as a master transceiver of the RF network (column 10, lines 33 – 36), and each transceiver designated as a master does not answer paging (column 12, lines 33 – 41).

Regarding Claim 8, Takatori et al. discloses the limitation of the method of claimed paging be performed by the master (column 12, lines 33 – 41).

Regarding Claim 9, Takatori et al. discloses the limitation of the method of claimed wherein a node further including a transceiver for communication with wireless terminals (Fig. 3, column 11, lines 62 – 67), whereby a wireless terminal in transmission range of a node may communicate with another wireless terminal in transmission range of a node (Fig. 3, column 12, lines 1 – 8).

Regarding Claims 10, 11, Takatori et al. discloses the limitation of the method of claimed wherein a transceiver further communicating with wireless terminals (Fig. 3, column 11, lines 62 – 67; column 12, lines 1 – 5), whereby a wireless terminal in transmission range of a node may communicate with another wireless terminal in transmission range of a node (Fig 3, elements 1 and 2A).

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Regarding Claim 12, Takatori et al. discloses the limitation of the method of claimed wherein each transceiver further has a password associated with it (column 17, lines 13 – 15), and wherein: in step (c), passwords are included in paging (column 17, lines 15 – 20); and a node does not reply to paging unless the password included in paging matches the password associated with the transceiver (column 16, 62 – 67; column 17, lines 1 – 3).

Regarding Claim 45, Takatori et al. discloses the limitation of a self-configuring RF network (Fig. 2, column 2, lines 12 – 15), the network comprising: a plurality of nodes for communicating wirelessly with other nodes of the RF network (Fig. 3, column 12, lines 1 – 5), wherein at least one of the nodes is selected as a control node (column 12, lines 9 – 14), each node including: a control logic (Fig. 2, elements 21 and 11); a data store connected to the control logic (Fig. 2, elements 29 and 19; column 13, lines 59 – 61); at least one transceiver connected to the control logic and identified by a unique address for communicating wirelessly with other nodes of the network (column 12, lines 33 – 41); a transceiver list database connected to the data store for storing updateable information of all transceivers of the RF network for network configuration (column 14, lines 14 – 20); and a dynamic variable linked to the transceiver list database for indicating position of each node in the RF network relative to the control node (column 3, lines 64 – 67; column 4, 1 – 2). But Takatori et al. does not disclose expressly the RF network of claimed wherein a transceiver not within transmission range of a certain node communicates with the certain node by relaying through other of

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the nodes. Bridgelall discloses the limitation of the RF network of claimed wherein a transceiver not within transmission range of a certain node communicates with the certain node by relaying through other of the nodes (column 3, lines 43 – 47). It would have been obvious to modify Takatori et al. to include the RF network of claimed wherein a transceiver not within transmission range of a certain node communicates with the certain node by relaying through other of the nodes such as that taught by Bridgelall in order to provide an improved method and system for locating objects having a data communication mobile unit or an RFID tag.

Regarding Claim 53, Takatori et al. discloses the limitation of a self-configuring RF network (Fig. 2, column 2, lines 12 – 15), the network comprising: a plurality of nodes for communicating wirelessly with other nodes of the RF network (Fig. 3, column 12, lines 1 – 5), wherein at least one of the nodes is selected as a control node (column 12, lines 9 – 14), each node including: a control logic (Fig. 2, elements 21 and 11); a data store connected to the control logic (Fig. 2, elements 29 and 19 ; column 13, lines 59 – 61); at least one transceiver connected to the control logic and identified by a unique address for communicating wirelessly with other nodes of the network (column 12, lines 33 – 41); a transceiver list database connected to the data store for storing updateable information of all transceivers of the RF network for network configuration (column 14, lines 14 – 20); and a dynamic variable linked to the transceiver list database for indicating position of each node in the RF network relative to the control node (column 3, lines 64 – 67; column 4, 1 – 2). But Takatori et al. does not disclose



expressly the RF network of claimed wherein the software means is further operative for determining, according to dynamic variable information, a route traversing the fewest nodes from a node to the control node. Bridgelall discloses the limitation of the RF network of claimed wherein the software means is further operative for determining, according to dynamic variable information, a route traversing the fewest nodes from a node to the control node (column 5, lines 16 – 28). It would have been obvious to modify Takatori et al. to include the RF network of claimed wherein the software means is further operative for determining, according to dynamic variable information, a route traversing the fewest nodes from a node to the control node such as that taught by Bridgelall in order to provide an improved method and system for locating objects having a data communication mobile unit or an RFID tag.

Regarding Claim 54, Takatori et al. discloses the limitation of a self-configuring RF network (Fig. 2, column 2, lines 12 – 15), the network comprising: a plurality of nodes for communicating wirelessly with other nodes of the RF network (Fig. 3, column 12, lines 1 – 5), wherein at least one of the nodes is selected as a control node (column 12, lines 9 – 14), each node including: a control logic (Fig. 2, elements 21 and 11); a data store connected to the control logic (Fig. 2, elements 29 and 19 ; column 13, lines 59 – 61); at least one transceiver connected to the control logic and identified by a unique address for communicating wirelessly with other nodes of the network (column 12, lines 33 – 41); a transceiver list database connected to the data store for storing updateable information of all transceivers of the RF network for network configuration

(column 14, lines 14 – 20); and a dynamic variable linked to the transceiver list database for indicating position of each node in the RF network relative to the control node (column 3, lines 64 – 67; column 4, 1 – 2). But Takatori et al. does not disclose expressly the RF network of claimed wherein the software means is further operative for: dynamically updating load information of a node and at least nodes within communication a distance of the node; and selecting, according to load information, a route traversing least loaded nodes from among two or more routes traversing equal numbers of nodes from a node to the control node. Bridgelall discloses the limitation of the RF network of claimed wherein the software means (column 5, lines 23 – 28) is further operative for: dynamically updating load information of a node and at least nodes within communication a distance of the node (column 3, lines 52 – 56; column 5, lines 16 – 20); and selecting, according to load information, a route traversing least loaded nodes from among two or more routes traversing equal numbers of nodes from a node to the control node (column 4, lines 1 – 8). It would have been obvious to modify Takatori et al. to include the RF network of claimed wherein the software means is further operative for: dynamically updating load information of a node and at least nodes within communication a distance of the node; and selecting, according to load information, a route traversing least loaded nodes from among two or more routes traversing equal numbers of nodes from a node to the control node such as that taught by Bridgelall in order to provide an improved method and system for locating objects having a data communication mobile unit or an RFID tag.

***Allowable Subject Matter***

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9. Claims 39, 40, 41, 42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACL  
12 October 2004

  
**Ajit Patel**  
**Primary Examiner**